



Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137



May 28, 2020

**Federally-Enforceable District-Origin Operating Permit
(FEDDOOP)
Statement of Basis**

Source: Marcus Paint Company
235 East Market Street
Louisville, KY 40202

Owner: Marcus Paint Company, Inc.
235 East Market Street
Louisville, KY 40202

Application Documents:	See Table I-9	Administratively Complete:	March 17, 2020
Draft Permit:	April 24, 2020	Proposed Permit:	April 24, 2020
Permitting Engineer:	Ulalo Chirwa	Permit Number:	O-0144-20-F
Plant ID:	0144	SIC:	2851
		NAICS:	32551

Introduction:

This permit will be issued pursuant to District Regulation 2.17- Federally Enforceable District Origin Operating Permits. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

This permit's action renews the company's operating permit.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter less than 10 microns (PM₁₀), and particulate matter less than 2.5 microns (PM_{2.5}). Jefferson County is classified as a nonattainment area for ozone (O₃). This facility is located in the portion of Jefferson County that is an attainment area for sulfur dioxide (SO₂).

Permit Application Type:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> Permit revision	<input checked="" type="checkbox"/> Permit renewal
	<input type="checkbox"/> Administrative	
	<input type="checkbox"/> Minor	
	<input type="checkbox"/> Significant	

Compliance Summary:

<input checked="" type="checkbox"/> Compliance certification signed	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Source is out of compliance	<input checked="" type="checkbox"/> Source is operating in compliance

I Source Information**1. Product Description:**

Marcus Paint Company manufactures industrial solvent and water based paints for resale.

2. Process Description:

Raw materials are stored in storage tanks. Liquid raw materials are mixed in process tanks. Pigments are added through the high-speed dispersers. The final product is transferred into pails for final shipment.

3. Site Determination:

There are no other facilities that are contiguous or adjacent to this facility.

4. Emission Unit Summary:

Emission Unit	Equipment Description
U1	Four (4) Red Head sand mills Eight (8) high-speed dispersers Test panel spray booth area for quality control and evaluation Sixteen (16) product process and storage tanks
IA1	One (1) natural gas boiler less than 10 MMBtu/hr

5. Fugitive Sources:

The fugitive emission sources are uncontrolled process and blending tanks.

6. Permit Revisions:

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
124-03-F	04/13/2003	05/30/2003	Initial	Initial Permit Issuance
O-0144-14-F	12/06/2014	04/07/2015	Renewal	Renewal
O-0144-14-F (R1)	06/11/2015	07/21/2015	Revision	Remove Federal Regulation 40 CFR 63 Subpart CCCCCC, because it is not applicable
O-0144-20-F	04/24/2020	05/28/2020	Renewal	Renewal

7. Construction Permit History: NA

8. Application and Related Documents

Document Number	Date	Description
128974	01/23/2020	FEDOOP Renewal Application
135321	03/17/2020	Administratively complete letter
135729	03/24/2020	Source correspondence providing potential PM emissions

9. Emission Summary

Pollutant	Actual Emissions (tpy) 2019 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	NA	No
NO _x	NA	No
PM ₁₀	NA	No
SO ₂	NA	No
VOC	3.26	Yes
Total HAPs	0.12	Yes
Single HAP > 1 tpy		
Xylene	0.05	Yes

10. Applicable Requirements

- | | | |
|------------------------------------|---|------------------------------------|
| <input type="checkbox"/> 40 CFR 60 | <input checked="" type="checkbox"/> SIP | <input type="checkbox"/> 40 CFR 63 |
| <input type="checkbox"/> 40 CFR 61 | <input checked="" type="checkbox"/> District Origin | <input type="checkbox"/> Other |

11. Referenced Federal Regulations:

The source has no federal requirements.

12. Non-Applicable Regulations:¹

40 CFR 63 Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing does not apply to this facility, because the regulation is not applicable based on 40 CFR 63.11607 and the definition of “Material Containing HAP”. The material containing HAP used at the facility is less than 0.1 percent by weight.

¹ These regulations were applicable in permit O-0144-14-F but are no longer applicable for the reason shown.

II Regulatory Analysis

1. Stratospheric Ozone Protection Requirements:

Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Marcus Paint Company does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

2. Basis of Regulation Applicability

a. Applicable Regulations

Regulation	Title	Basis
2.17	Federally Enforceable District Origin Operating Permits	This regulation applies to any stationary source, or one or more processes or process equipment at a stationary source, for which the owner or operator voluntarily applies for a federally enforceable District origin operating permit.
6.09	Standards of Performance for Existing Process Operations	Establishes emission standards for processes that emit PM which were constructed before September 1, 1976.
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	Applicable to each VOC storage vessel that commences construction or modification before April 19, 1972, and has a storage capacity greater than 250 gallons.
6.24	Standard of Performance for Existing Sources Using Organic Materials	Applies to any affected facility using any organic materials which was in being prior to June 13, 1979.

b. Plantwide

Marcus Paint Company is potentially major for VOC, Single HAP, and Total HAPs. Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Marcus Paint Company has requested emission limits of less than

25 tons per year for all criteria pollutants, less than 12.5 tons/year for total HAPs and less than 5 tons per year for each individual HAP to be considered exempt from local TAC (STAR) regulations, as defined by Regulation 5.00, section 1.13.5.

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the district upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued to submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit a regular reports to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.1.

c. Emission Unit U1 – Paint Manufacturing System

Emission Point	Description	Applicable Regulations	Control ID
E1	Red Head Sand Mill, 16 gal	6.09 & 6.24	N/A
E2	Red Head Sand Mill, 16 gal		
E3	Red Head Sand Mill, 3 gal		
E4	Red Head Sand Mill, 3 gal		
E5	High-Speed Disperser Twin, 30HP		
E6	High-Speed Disperser, 25 HP		C1
E7	High-Speed Disperser, 25 HP		
E8	High-Speed Disperser, 15 HP		
E9	High-Speed Disperser, 15 HP		
E10	High-Speed Disperser, 15 HP		
E11	High-Speed Disperser, 20 HP		
E12	High-Speed Disperser, 2 HP		
E13	High-Speed Disperser, 2 HP		
E14	Test Panel Spray Booth	6.09 & 6.24	C2
E15	Storage Tank, 1300 gal	6.13	N/A
E16	Storage Tank, 1300 gal		
E17	Storage Tank, 1300 gal		
E18	Storage Tank, 1300 gal		
E19	Storage Tank, 1300 gal		

Emission Point	Description	Applicable Regulations	Control ID
E20	Storage Tank, 1300 gal		
E21	Storage Tank, 1300 gal		
E22	Storage Tank, 1300 gal		
E23	Process Tank, 1100 gal	6.24	N/A
E24	Process Tank, 1100 gal		
E25	Process Tank, 1300 gal		
E26	Process Tank, 1300 gal		
E27	Process Tank, 4000 gal		
E28	Process Tank, 4000 gal		
E29	Process Tank, 4000 gal		
E30	Process Tank, 4000 gal		
E31	Portable Process Tank, 268 gal ²	6.24	N/A
E32	Portable Process Tank, 268 gal		N/A
E33	Portable Process Tank, 268 gal		N/A
E34	Portable Process Tank, 268 gal		N/A
E35	Portable Process Tank, 306 gal		N/A
E36	Portable Process Tank, 306 gal		N/A
E37	Portable Process Tank, 315 gal		N/A
E38	Portable Process Tank, 315 gal		N/A
E39	Portable Process Tank, 343 gal		N/A
E40	Portable Process Tank, 353 gal		N/A
E41	Portable Process Tank, 372 gal		N/A
E42	Portable Process Tank, 372 gal		N/A
E43	Portable Process Tank, 390 gal		N/A
E44	Portable Process Tank, 390 gal		N/A
E45	Portable Process Tank, 390 gal		N/A
E46	Portable Process Tank, 585 gal		N/A
E47	Portable Process Tank, 603 gal		N/A
E48	Portable Process Tank, 311 gal	6.24	N/A
E49	Portable Process Tank, 278 gal		N/A
E50	Portable Process Tank, 275 gal		N/A
E51	Portable Process Tank, 268 gal		N/A

² Portable Process Tanks (E31 – E81) are not stored in the production area between batches. Specific tanks are used based on batch size and placed under a mixer so that product can be added under agitation.

Emission Point	Description	Applicable Regulations	Control ID
E52	Portable Process Tank, 268 gal		N/A
E53	Portable Process Tank, 268 gal		N/A
E54	Portable Process Tank, 263 gal		N/A
E55-E81	Various Portable Process Tanks, <250 gal		N/A

Control ID	Description	Pollutant Controlled	Stack ID
C1	Torit Dust Collector	PM	S1
C2	Dry Filters	PM	N/A

i. Standards/Operating Limits

(1) HAP

Regulation 2.17, section 5.1 establishes the requirement to include specific conditions in the permit to limit the plantwide emissions of individual and total combined HAPs to be a FEDOOP exempt from STAR.

(2) Opacity

Regulation 6.09, section 3.1.1 establishes an opacity standard of less than 20% for this equipment.

(3) PM

- (a) For emission processes subject to Regulation 6.09 for PM, the PM emission standards are calculated per section 3.1. The equation to calculate the hourly PM emission limit is $E = 4.10 P^{0.67}$, where E is the allowable lb/hr PM emission limit and P is the process weight rate expressed in tons/hr.
- (b) These hourly standards cannot be exceeded uncontrolled, based on potential emissions.

(4) VOC

- (a) Regulation 2.17, section 5.1, allows the source to set a synthetic limit below the major source threshold. The source has requested a synthetic limit of less than 25 tons per year of the pollutant VOC to be exempt from STAR.
- (b) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III Solvents.

- (c) Regulations 6.13, section 3.3 require submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater. All storage tanks have submerged fill.

III Other Requirements

1. Temporary Sources:

The source did not request to operate any temporary facilities.

2. Short Term Activities:

The source did not report any short term activities.

3. Emissions Trading:

The source is not subject to emission trading.

4. Alternative Operating Scenarios:

The source did not request any alternative operating scenarios.

5. Compliance History:

There are no records of any violations of the terms of the present or prior construction or operating permits.

6. Calculation Methodology or Other Approved Method:

The VOC emission calculations are based upon VOC content of the material used. The VOC storage tanks emissions are based upon the VOC content of the stored material and the amount of material in the tank.

The HAP emissions calculations are based upon the throughput of HAP containing Material used and weight percent of the HAP.

7. Insignificant Activities

Equipment	Qty.	Regulation Basis
Natural Gas Boiler, 0.5 MMBtu/hr	1	Regulation 1.02, Appendix A, section 1.1
Emergency relief vents, stacks and ventilating systems	1	Regulation 1.02, Appendix A, section 3.10
Laboratory ventilating and exhausting system which are not used for radioactive air contaminants	2	Regulation 1.02, Appendix A, section 3.11
Research and Development (R&D) Lab Equipment:	-	Regulation 1.02, Appendix A, section 3.27

Equipment	Qty.	Regulation Basis
Six (6) air-powered lab mixers, two (2) Electric lab mixers, two (2) electric oven for curing test panels coated in the lab and one (1) gas-fired oven for curing test panels coated in the lab		

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
3. The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
6. The District has determined that no monitoring, recordkeeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.